
10-9

Preference Erosion, the Doha Round, and African LDCs

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Executive Summary

African least-developed countries (ALDCs) have enjoyed preferential treatment in exporting their agricultural products to developed countries. Reductions of agricultural trade barriers on a most-favored nation (MFN) basis by preference-granting developed countries may erode the benefits of these preferences. In particular, MFN tariff reductions coordinated through a World Trade Organization (WTO) agreement could cause serious preference erosions, and the current Doha Round of trade negotiations, aimed at ambitiously reducing agricultural trade barriers, may conclude with such an agreement.

The Doha Round has also declared a “development agenda,” which emphasizes the interests of developing countries, including the LDCs. The so-called special and differential treatment of developing countries—of which trade preferences make up an important instrument—is designed to help realize the development agenda and counter any unwanted consequences from multilateral liberalization. Some WTO members have discussed extending trade preferences as a way to safeguard the interests of the LDCs, but the desirability and feasibility of this proposal have been debated with diverging views.

This case discusses a range of policy issues relating to preference erosion and WTO multilateral trade liberalization, including the role of preferences in promoting exports from the ALDCs, the extent and scope of likely preference erosion, and the possibility of extending preferences. It analyzes the positions and interests of several key stakeholders, especially the ALDCs, and presents policy options for tackling these issues. Specifically, the so-called July Package proposal for extending preferences has been interpreted as “deepening, widening, broadening, and strengthening” preferential treatment for ALDCs. An analysis of the quantitative estimates of the impact of these actions shows that preference erosion is indeed a concern for the ALDCs and that adopting the July Package will help the ALDCs cope with the erosion. Furthermore, costs to the preference-granting countries of adopting these measures are estimated to be modest, and trade diversion does not appear to be a serious concern for third countries.

Responding to concerns about preference erosion, a number of authors argue that enhancing preferences is not the right answer to the problem. They insist that the multilateralism championed by the WTO will eventually help the poorest countries and that transitory issues such as preference erosion can be handled by complementary nontrade policy measures, including effective development aid and investment in domestic infrastructure.

Your assignment is to propose a policy package that would tackle the preference erosion problem facing ALDCs, for discussion by the WTO. The package may include policies to strengthen preferences and/or complementary measures.

Background

African least-developed countries have enjoyed preferential treatment in exporting their agricultural products to developed countries. These preferences are attractive to the ALDCs because of the low trade barriers compared with those facing non-beneficiary countries. In many cases, the high MFN trade barriers established by developed countries support artificially high prices in their domestic markets. Tariff preferences make it possible for the beneficiary countries to enjoy these artificially high prices.¹ For instance, two systems of nonreciprocal trade preferences specifically concern the LDCs’ exports to the EU—the African, Caribbean, Pacific countries (ACP) preferences and the Generalized System of Preferences (GSP) scheme, with the latter recently replaced by the Everything but Arms (EBA) initiative (European Community 2001a). The EBA covers all the LDC countries designated by the United Nations and removes all restrictions, including tariffs and tariff rate quotas, on virtually all exports from the LDCs to the European Union,

¹ Whether the difference between the high domestic price in a preference-granting country and the corresponding world market price is collected by the preference-receiving country is an empirical question. It is possible that this wedge is either partially or fully captured by the preference-granting country. In the discussion here, it is assumed that beneficiary countries receive at least part of the wedge.

without reciprocal action by the LDCs (see Yu and Jensen 2005 for an introduction to the EBA).

Other developed countries also offer preferences to the ALDCs, either through their own GSP schemes or through specially designed preference schemes. For example, the ALDCs receive preferences from the United States through the GSP program for the LDCs, whose terms are typically more favorable (duty-free access for covered exports) than those for non-LDC countries. Many ALDCs have also become eligible for the African Growth and Opportunity Act (AGOA). Like the United States, Japan grants preferences to the LDCs through its own GSP program. Unlike the U.S. GSP program, however, the Japanese GSP program does not grant duty-free access for the covered products, and average tariff rates for covered products are only slightly lower than the average preferential rates for non-LDC GSP countries. In general, judging from their product coverage and the depth of the margins of the preferences, the preference schemes of non-EU developed countries are not as favorable as the EBA.

Reducing agricultural trade barriers on an MFN basis, however, may erode the benefits of these preferences to the preference-receiving countries. On the one hand, MFN trade reforms—unilateral or multilateral—lower market access barriers and other protection measures for exports from the LDCs' competitors, thereby reducing the advantages of the preference-receiving countries over their competitors. On the other hand, the dismantling of trade barriers by the preference-granting countries may lead to lowered domestic market prices in these countries, thereby hurting high-cost, preference-receiving exporters. In addition, MFN trade reforms by large trading countries generally push up world market prices, thereby hurting net food-importing countries, including many of the ALDCs. When MFN tariff cuts are coordinated at the multilateral level—which has often happened following the conclusion of a GATT/WTO trade negotiation round—the effect on preference erosion can be serious.

One of the aims of the current Doha Round of WTO negotiations is to tackle the unfinished business from the Uruguay Round by ambitiously reducing agricultural trade barriers. At the same time the Doha Round has a "development agenda," which emphasizes the interests of developing

countries, including least-developed countries. The so-called special and differential treatment of developing countries—of which trade preferences make up an important instrument—is designed to realize the development agenda and to counter any unwanted consequences of the multilateral liberalization process. Among the many proposals suggested during the lengthy negotiation process, extending trade preferences has been included as a way to safeguard the interests of the LDCs. For instance, in the so-called July Package of the WTO agricultural trade negotiations (WTO 2004, A-7), it is stipulated that "developed Members, and developing country Members in a position to do so, should provide duty-free and quota-free market access for products originating from least-developed countries." This proposal reflects the position of the ALDCs: they ask for further preferential treatment from developed and advanced developing countries and exemptions from reforming their own policies.

Debates on the desirability and feasibility of adopting this proposal are ongoing. Some worry about the inability of preferences to promote agricultural exports and economic development in the LDCs and doubt the value of preferences as an effective measure of special and differential treatment. In support of this argument, adherents often cite the poor export performance of the LDCs. These worries are compounded by the fear that the preferential approach may slow down the multilateral liberalization process and compromise or delay potential gains from a freer multilateral trading system. Others point out that developing countries in general could gain more from market access reforms based on the MFN approach and that the erosion of preferences (due to MFN liberalization) does not appear to be a big issue if substantial MFN reforms are conducted multilaterally. Still others argue that the LDCs do not necessarily gain from multilateral trade reforms, that the existing preferences are vital to their interests, and that any enhancement of such preferences would help mitigate any adverse effects from multilateral reforms. Lastly, many have noticed that various conditions, clauses, and rules attached to existing preference programs may have hindered recipient countries from taking full advantage of these programs and therefore preferences should not be held responsible for the poor export performance of the LDCs. Instead of giving up on preferences altogether, some argue that efforts

should be made to improve the rules associated with the preference programs to make them more effective.

Taking the July Package as the departure point, this case discusses a range of policy issues relating to preference erosion and WTO multilateral trade liberalizations. It analyzes the positions and attitudes of several key stakeholders and presents policy options for tackling the policy issues.

Policy Issues

Several policy issues are relevant to this analysis of the desirability of enhancing trade preferences. The first issue concerns the role of trade preferences in promoting exports and growth in the LDCs and whether or not they have actually been utilized. Next is the issue of whether preference erosion is serious enough to warrant talks about enhancing these preferences. The third issue is whether there is the needed “policy space” to implement the proposal. Lastly, some quantitative estimates on the costs and benefits of implementing the proposal are offered.

The Role of Preferences in Promoting Exports and Growth

Existing preference programs were often established for the purpose of promoting exports from the recipient countries. By stimulating exports from these countries, these preferences, it was hoped, would lead to economic growth there. Naturally, the debate on preferences not only concerns the associated short-term commercial value, but also the long-run implications for export-led economic growth. Moreover, as this favorable treatment is not meant to be constant and permanent—the reference MFN trade barriers in agriculture were reduced following the Uruguay Round and are expected to fall further as an outcome of the Doha Round—the wisdom of lobbying for this intrinsically temporary favor has also been questioned.

Judging from the poor export and general economic performance of the LDCs—whose export shares in total world trade have actually declined—it seems that preferences have not realized their declared purposes. It would be difficult to pin the causes of the poor performance solely on trade preferences, however, and to simply declare the

demise of such programs. Any empirical analysis would have to establish a counterfactual scenario in which these economies had faced the MFN trade barriers and then compare this hypothetical scenario with reality.

Instead of debating the general role of preferences, a more tangible issue is the actual utilization of agricultural trade preferences by the recipient countries, which reveals the perceived value of preferences to the recipient countries. A few recent papers explore this issue by painstakingly collecting detailed trade data at tariff line levels and identifying whether exports under a specific tariff line in a certain market actually applied the available preferential tariffs. For instance, Inama (2004) observed underutilization of several trade preference programs (covering both agricultural and non-agricultural products) by the so-called QUAD countries (Canada, the EU, Japan, and the United States). The study argues that the value and effectiveness of the preferences available to LDCs’ exports are discounted by the observed low utilization rates—a finding that is probably caused by the study’s failure to take into consideration the fact that exports from beneficiary countries may be eligible for multiple preference programs offered by the same preference-granting country (that is, multiple eligibility). Unlike the Inama study, a 2004 study from the Organization for Economic Cooperation and Development (OECD) focuses exclusively on the utilization of agricultural preferences granted by the EU and the United States. By observing multiple eligibility, the study finds that preference utilization rates are actually quite high for both the EU and the U.S. preference programs. For the EU programs, the overall utilization rate exceeded 89 percent in 2002, and half of the eligible imports that did not use preferences entered the EU mostly through duty-free quotas and tariff suspensions. For the U.S. programs, the utilization rate was 88 percent in 2002. Some of the eligible exports entered the U.S. market under MFN rates owing to rules of origin and compliance costs, whereas other eligible exports opted for the low available MFN rates.

To summarize, when the multiple eligibility phenomenon is accounted for, it appears that agricultural trade preferences have indeed been used, implying that developing countries derive commercial value from these programs. The main problem associated with these programs is the

observed low export volumes, which are probably partially related to the limited product coverage of existing preference programs.² Improving trade preferences by enlarging product coverage of such programs and by asking more countries to grant such preferences could expand exports from the recipient countries.

Preference Erosion and Multilateral Liberalization

In addition to the apparent usefulness of preferences to the recipient countries, the case for their enhancement can be further illustrated by analyzing the issue of preference erosion in the presence of multilateral liberalization.

Is preference erosion a legitimate concern? How large would the negative effect associated with preference erosion be? Several recent studies have discussed the impact of multilateral liberalization or unilateral MFN liberalization by individual preference-granting countries on preference-receiving countries. Wainio and Gibson (2004) point out that the exact impact of MFN tariff cuts by the United States on countries receiving its nonreciprocal preference programs depends on the scope of the preferential treatment granted, the size of preference margins, and the depth of the MFN tariff cuts. They show that overall the beneficiary countries of the U.S. preference programs would gain from MFN tariff liberalization. For countries highly dependent on preferences, however, the negative effects of preference erosion outweigh the positive effects of MFN tariff liberalization. A slightly later study by Wainio and Gehlhar (2004) provides a detailed description of U.S. nonreciprocal preference programs, covering eligible products and countries, margins of the preferences (compared with the MFN rates), products excluded from the preferences and the applicable MFN rates, and the export patterns of the beneficiary countries in the U.S. market. Based

on this detailed data analysis, the study examines whether beneficiaries of U.S. nonreciprocal trade preference programs gain more from cutting MFN rates on products excluded from these programs or lose more from the erosion of the preferences that they do enjoy. They conclude that developing countries as a whole would gain market shares in the U.S. market from substantial MFN tariff liberalization and that it is counterproductive for these countries as a group to oppose MFN liberalization. In drawing this conclusion, they emphasize the potential gains from liberalizing those products that are not included in the preference programs. Their results also show, however, that there would be only minor export expansions in the U.S. market for the LDCs (Wainio and Gehlhar 2004, Tables 7–9), and their share in total U.S. imports would drop after MFN reforms, confirming the likely vulnerable position of the LDCs in the upcoming multilateral trade liberalization.

Unlike the U.S. preferences, which have incomplete coverage for agriculture and food products, the EU preferences granted to the LDCs provide broader product coverage and have recently been enhanced with the adoption of the EBA initiative. Not surprisingly, the amount of agricultural exports and the range of products exported from the ALDCs to the EU far exceed those to the United States. Yu and Jensen (2005) assess the impact of the EBA initiative on the ALDCs and show that further multilateral trade liberalization may erode the EBA preferences. Because the EBA extends product coverage only slightly beyond that of previous preference programs, the welfare impacts of the EBA on the ALDCs are shown to be small. Moreover, these small gains are likely to disappear if the EU adopts MFN trade policy reforms, with the result that the ALDCs would actually be worse off. Extending the analysis to a multilateral trade liberalization scenario reinforces the finding that the LDCs may well lose owing to preference erosion and higher world market prices for their imports. These results are echoed in Bureau et al. (2004). They find that the implementation of the “Harbinson proposal” would lead to a slight welfare gain (0.3 percent) for the poorest countries. The gain is not evenly distributed, however—Sub-Saharan African countries as a whole would experience a slight loss (0.1 percent) owing to preference erosion and higher costs for imported food.

² This is especially the case for those excluded products that the LDCs have the potential to export and that face high tariffs. For instance, agricultural products excluded from the U.S. preference programs generally have higher tariffs than those products included in the programs. It should be noted, however, that in some instances, even given the enhanced preferential treatment, the LDCs may still not be able to realize their potential, owing to poor infrastructure, high domestic transaction costs, and inadequate investment.

Because of the differences in the EU and U.S. preference programs and the narrower focus on the ALDCs by the Yu and Jensen study, the above cited studies reach different policy implications. Whereas the Wainio and Gehlhar study finds that MFN reforms would lead to more gains in the U.S. market for developing countries as a whole and that multilateral liberalization is generally a better option for developing countries, the Yu and Jensen study concludes that the ALDCs may well lose from this process. It appears from the results of Wainio and Gehlhar, however, that the LDCs' share in the U.S. import market would decline following the MFN reform, a point that is consistent with Yu and Jensen. The Wainio and Gibson study provides indirect support to this point as well by concluding that countries highly dependent on trade preferences may lose from preference erosion. Therefore, there seems to be some agreement about the LDCs' vulnerability in coping with MFN market access reforms by preference-granting countries.

Stakeholders

So far, the analysis has focused on the African LDCs, the obvious stakeholders who are in danger of suffering from preference erosions. They are not the only stakeholders in this discussion, however, as preference-granting developed countries, developing countries not covered in nonreciprocal preference programs, and the General Agreement on Tariffs and Trade (GATT)/WTO are all concerned and involved.

Preference-Granting Developed Countries

The interests of the preference-granting developed countries are multidimensional, ranging from maintaining tariff revenues, supporting domestic production, and balancing the interests of other trading partners to avoiding compromising their positions in the multilateral negotiations. In addition, geopolitics and non-economic strategic interests may also influence the actions of these countries. Here, the discussion is limited to these countries' economic concerns.

First and most obviously, further reducing preferential trade barriers will lead to reduced tariff revenues for the preference-granting countries, provided that the goods under the preference

programs are currently imported, with bigger losses associated with larger current preferential imports. Second, depending on the size of the current preferential imports and the cuts to current preferential trade barriers, domestic producers in the preference-granting countries may be hurt by a surge in expanded preferential imports. This disguised "cost" can be desirable for consumers, however, if the increased imports help to bring down artificially high domestic prices. Third, in the case of a preference-granting country also providing less favorable preferences to non-LDC developing countries, reducing preferential trade barriers to the LDCs will "erode" the preference enjoyed by these other countries. This erosion can become a concern for the preference-granting countries if they want to keep those preferences attractive to the non-LDC developing countries. For instance, the transitory measure adopted in the EBA regarding sugar exports from the LDCs may be more a response to the demands from non-LDC ACP countries than to those from domestic producers in the EU. Lastly but perhaps most important, a developed country's attitude toward preferences is an integrated component of its overall negotiation position in the WTO multilateral talks. Therefore, whether or not a country is willing to enhance its nonreciprocal preferences will depend on how that country evaluates the influence of the change on its overall negotiation objectives and strategies in the multilateral talks.

Developing Countries Not Covered in Nonreciprocal Preference Programs

For developing countries that are not covered in any preference program, there are two questions: Does enhancing preferences for the LDCs divert trade away from these countries? And can the loss due to diverted trade be made up through MFN cuts by the preference-granting countries? Answers to these questions depend on the composition and pattern of exports of these countries vis-à-vis those of the LDCs. If a developing country is competing directly with LDCs in the same export market, then further reducing preferential tariffs for the LDCs may divert trade away from that country. MFN tariff cuts by the same developed country may, however, make up for the diverted trade flow.

WTO Multilateral Trade Negotiations

The delays (and the recent suspension) in the current WTO agricultural trade negotiations demonstrate the difficulties of reaching an agreement when negotiating parties have varying interests in a host of negotiation areas. A member's ability to influence the negotiation agenda in the presence of diverging views and interests is decided largely by its power and negotiation capacities. Traditionally, large rich countries and blocs of rich countries have had the power and negotiation capacities to influence the agenda of past trade talks. In the Doha Round, large developing countries have started to form alliances (such as the Group of 20, or G-20) for the purpose of putting their interests on the negotiation table. The LDCs, however, have remained more or less on the fringe of these talks because of their lack of negotiation capacities and skills. It is thus no surprise that the issue of preference erosion has not been taken more seriously by the major players in the negotiations (of course, the nonreciprocal nature of preferences also makes it difficult for the LDCs to engage in give-and-take bargaining). But by not taking the issue of preference erosion seriously, the Doha Round runs the risk of further alienating the poorest members of the WTO, who are supposed to benefit from the round's development agenda.

Policy Options for Improving ALDCs' Market Access

The evidence suggests that agricultural trade preferences have been widely used and that preference erosion is a legitimate concern from the perspective of the ALDCs (if not for developing countries as a whole). The next logical question is how the preferential treatment—as part of the special and differential treatment stipulated in the Doha development agenda—can be improved. There are both trade-related and non-trade-related policy options. Here, the discussion is limited to how LDCs' market access can be improved through enhanced preferences.

Deepening, Widening, Broadening, and Strengthening Agricultural Trade Preferences

The July Package text entails a full set of trade policy options to tackle the preference-erosion

issue. First, developed countries can “deepen” their preference programs by granting the ALDCs duty- and quota-free market access to all agricultural products covered in existing programs. Second, developed countries can “widen” the coverage of their preference programs by extending duty- and quota-free access to those agricultural products that have not been covered in existing programs. These two types of actions essentially imply EBA-style preference programs by all developed countries to the ALDCs. Third, preferential market access for ALDC exports can be “broadened” to include advanced developing countries in the group of preference-granting countries. Lastly, preference-granting countries can “strengthen” existing preference programs and new preference initiatives by making them permanent and unconditional. One possibility is to develop a set of WTO rules that would be applied to all preferential programs targeting the LDCs. The new rules should include simpler rules of origin and minimum administrative costs for exporters. They should not contain any eligibility conditions (beyond requiring recipients to be LDCs) that would exclude certain LDCs from the program or safeguard clauses that may discourage recipient countries from investing and from gaining substantial market shares.

Next, is there scope for implementing such a proposal, given the current state of existing preference programs? The answer here is an emphatic yes. Broadening preferences by including advanced developing countries is possible, as these countries generally have not yet provided the LDCs with extensive and substantial trade preferences. Strengthening existing trade preferences is not only needed, but also feasible because there are many problems associated with individual programs that limit their effectiveness in promoting exports from the recipient countries. The possibility of deepening and widening preferences granted by developed countries, however, deserves some elaboration.

Existing Preference Programs and the Scope for Implementing the Proposed Policy Measures

In the case of the EU, there seems to be limited room for improving its preference programs because of the recently adopted EBA initiative. Upon fully implementing the EBA (including phasing out the transitory measures for sugar, bananas, and rice), the EU will be in a good position to

argue for EBA-style preferences from all developed countries and advanced developing countries.

The cases of Japan and the United States are quite different from that of the EU. There, deepening and widening preferences for the ALDCs will require meaningful actions. The United States will need to expand existing programs to cover currently excluded products. The Japanese programs will need to both expand product coverage and deepen the preference margins for covered products.

The United States grants preferences to the ALDCs through the GSP program for the LDCs, which is typically more favorable (duty-free access to covered exports) than that for the non-LDC countries. Many ALDCs have also become eligible for the African Growth and Opportunity Act (AGOA). Data from the U.S. International Trade Commission (USITC)³ show that out of about 1,800 U.S. tariff lines, about 400 MFN tariff lines are duty free. Among the remaining tariff lines, about 1,100 lines are duty free for the LDCs through the U.S. preference programs. These preferences, however, lower the simple average tariffs faced by the LDCs only marginally (from the overall simple average of 9.7 percent to the simple average of 5.6 percent for the GSP-LDC countries). This is because the dutiable tariff lines not covered in the preference programs generally have higher tariffs than those lines covered in the preference programs. Therefore, there is scope for extending those preferences to the dutiable lines that are not covered in the current U.S. preference programs.

Like the United States, Japan grants preferences to the LDCs through the GSP program.⁴ Before 2003, this program granted preferences to about 300 tariff lines (out of about 2,000 lines) for the LDCs, reducing the average duty for the LDCs from 15.6 percent to 14.2 percent. For those lines not covered by the GSP, there are about 400 duty-free lines and more than 1,300 dutiable lines. Those uncovered dutiable lines generally have higher tariff rates. Unlike the U.S. GSP program, the Japanese

GSP programs did not grant duty-free access for the covered products, and the average tariff rate for covered products was 9.8 percent for the LDCs, only slightly lower than the average preferential rate for non-LDC GSP countries. Since 2003 Japan has expanded GSP product coverage for the LDCs by adding about 200 products, or about 10 percent of total tariff lines. So it seems that Japan would have to make extensive concessions to the LDCs in order for them to enjoy universal duty- and quota-free access to its market.

In addition, there is ample room for strengthening these preferences. A long list of difficulties associated with applying the existing preferences can be compiled, ranging from eligibility rules, product coverage, and rules of origin to certainty of commitments and the number of schemes. In practice, some of these conditions and clauses play similar roles as nontariff barriers in limiting export expansion from the beneficiary countries.

Take, for example, the recent EBA initiative. The EBA largely retains the safeguard measures specified in the GSP of the EU, with some amendments. Most notable among the amendments is the addition of the situation of "massive imports into the EU market" as a trigger for withdrawing the preferences. With regard to three sensitive products (sugar, bananas, and rice), the EU is allowed to suspend preferences entirely if imports cause serious disruptions to the EU's mechanisms for regulating these products.⁵ In addition, the rules of origin specified in the GSP also apply to the EBA initiative. Likewise, the U.S. and Japan GSP programs contain various preconditions and clauses. According to USITC data (<http://www.usitc.gov>), the preferences offered through the AGOA are meant for all 48 Sub-Saharan African countries, but until recently only 37 countries from this region had gained eligibility. Likewise, only 41 LDCs are deemed eligible for its GSP-LDC preferences. The Japanese GSP program also contains safeguard clauses and a graduation clause to exclude one country's exports from the program when they

³ These are drawn from the summary compiled by Brenton and Ikezuki (2004) and Wainio and Gehlhar (2004).

⁴ Numbers in this paragraph are calculated from the United Nations Conference on Trade and Development (UNCTAD) TRAINS database and are drawn from Brenton and Ikezuki (2004).

⁵ Serious disruptions refer to, among other things, reduction in the market shares of European producers, reduction in their production, increases in their stocks, closure of their production capacity, bankruptcies, low profitability, low rate of capacity utilization, reduced employment, increased imports, and lowered prices (European Community 2001a, b).

reach a certain market share and a certain minimum value.

These measures and preconditions are clearly detrimental to creating a stable trading environment for the ALDCs, and they may discourage producers in the ALDCs from committing needed investments to reduce their high production costs. Panagariya (2002) argues that it is precisely these measures that have rendered preferences ineffective. Strengthening the legal status of the preferences by making them universal, permanent, and binding through WTO rules could well boost their performance.

Estimated Impacts of Implementing the Proposed Policy Measures on the Stakeholders

This section presents hypothetical scenarios of deepening, widening, and broadening agricultural trade preferences for the ALDCs, calculated using a quantitative simulation framework. Because of the multiregional and multisectoral nature of the issues to be analyzed, such scenarios are simulated within a global computable general equilibrium model named GTAP (Hertel 1997, Chapter 2). The GTAP model is accompanied by a global data set commonly known as the GTAP database (Dimaranan and McDougall 2002). The main components of the database are detailed input-output tables for all the regions and countries included in the data set; consistent bilateral trade flows among all the regions and countries; a protection data set that covers ad valorem tariff equivalents, export subsidies, and domestic support measures; and macroeconomic aggregates. Together, these components give a snapshot of the world economy at the base year of the database, and all the usual equilibrium conditions are satisfied in the database.

The latest version of the database, version 6, contains data for 86 regions and 57 commodities for the year 2001, including a fairly detailed breakdown of agricultural and food products. This study applies an aggregated version of this most recent GTAP database, with 21 aggregated regions and 24 aggregated products. The six individual African LDCs (Madagascar, Malawi, Mozambique, Tanzania, Uganda, and Zambia) are included in the aggregated database as one group (with the short name of SSA-1), whereas other African LDCs are largely included in the aggregated Rest of Sub-Sahara

African (SSA-2) region.⁶ Among the non-LDC regions are influential agricultural trading countries and regions such as Argentina, Australia and New Zealand, Brazil, Canada, China, the EU-25, India, Japan, and the United States. Agriculture and food products in the original GTAP database are incorporated in the aggregated version as separated items, including paddy rice, wheat, cereal grains, fruits and vegetables, oilseeds, plant fibers, other crops, other animal products, bovine meats, other meats, vegetable oil, dairy, processed rice, sugar, other processed food products, and beverages and tobacco. In addition to these, nonagricultural products are aggregated as natural resources, textiles and clothing, manufacturing, and services.

Scenarios of Implementation of the Policy Measures

The deepening, widening, and broadening scenarios can be formulated as the reduction or removal of relevant tariffs facing exporters from the ALDCs. In this study, the GTAP version 6 database is viewed as the initial equilibrium point of the world economy. After the shocks pertaining to the policy scenarios are applied to the model, new equilibria are computed and updated data sets corresponding to and describing the new equilibria are generated. The differences between the original data set (the base case) and the updated data sets are then summarized and viewed as the effects attributable to the policy changes.

Three hypothetical scenarios are considered. Scenario 1 is a multilateral market access liberalization scenario in which all the non-LDC regions contained in the aggregated data set are assumed to halve their MFN tariff rates for all agricultural and

⁶ The aggregated SSA-2 region contains 43 individual countries, of which 33 are LDCs and the rest are non-LDCs. Because the GTAP version 6 database does not provide a further breakdown of this region, we are forced to treat this as an aggregated LDC region. Any preference granted by developed and advanced developing countries in practice and in the hypothetical scenarios of the study is assumed to be available to the non-LDC countries in SSA-2 region as well. Consequently, numerical results obtained for this aggregated region are for both the LDC members and non-LDC members of this group. Nevertheless, because the majority of countries in this group are LDCs and most of the non-LDC members also receive preferences, it is expected that this is a meaningful grouping.

food products. To be consistent with the July Package proposal, the ALDCs are not assumed to reduce their own market access barriers. Such a scenario sets a benchmark against which the subsequent broadening and deepening scenarios can be compared.

Scenario 2 is the deepening and widening scenario. In addition to the MFN market access reforms as simulated in scenario 1, advanced economies (Australia and New Zealand, Canada, the EU-25, Japan, the Rest of East Asia [mainly South Korea and Taiwan], and the United States) are assumed to deepen and widen their preferential treatment for the ALDCs to the extent that all tariffs imposed on exports from the ALDCs are eliminated. This scenario essentially assumes an EBA offer from all advanced countries. The initiator of the EBA (the EU-25) is assumed to implement the EBA in its entirety, implying that the transitory measures on sugar, rice, and bananas are removed immediately. For other advanced countries, this scenario implies widening product coverage of their respective preference programs and deepening preference margins for covered products. Because the shocks contained in scenario 1 are also included in scenario 2, the differences between results obtained from scenarios 1 and 2 can then be attributed to the deepening of trade preferences.

Scenario 3 is the broadening scenario. The design of this scenario again allows for comparison with the previous scenarios. Here, both the multilateral market access reform shocks and the deepening shocks are included, in addition to the new shocks involving the extension of EBA-style preferences to the ALDCs by several large developing economies, including Argentina, Brazil, China, India, Mexico, and the Association of Southeast Asian Nations (ASEAN).

Results

Simulation results from the three policy scenarios are summarized in Tables 1 and 2. Here the focus is on the changes in total exports from the two ALDC regions and the resulting changes in economic welfare measured in equivalent variations. To facilitate discussing the individual effects of multilateral market access reforms, the deepening and widening of preferences, and the broadening of preferences, results for scenario 1 are calculated as changes/percentage changes from base case data,

whereas results for scenario 2 (scenario 3) are computed as changes/percentage changes from the updated dataset obtained from scenario 1 (scenario 2). In other words, the results reported for scenario 2 are due to the deepening and widening of preferences only, whereas the results reported for scenario 3 are due to the broadening of preferences only.⁷

Scenario 1. As Table 1 shows, total agricultural and food exports from both SSA-1 and SSA-2 would drop by more than 6 percent under scenario 1. Underlying this aggregate change are near-universal declines in exports of all agricultural and food products. The largest percentage changes are in fruits and vegetables, bovine meats, other meats, and sugar. The most significant changes in terms of trade volumes, however, are in other crops, other food, and fruits and vegetables, because these are the products in which the two ALDCs have substantial base case exports. For instance, the decreases in exports of other crops of 5.9 percent for SSA-1 and 4.4 percent for SSA-2 are equivalent to losses in export volumes of around US\$60 million for the former and US\$150 million for the latter. Among the few exceptions to this declining pattern are the slight increases in exports of rice and plant fibers. Only the increases in plant fiber exports, however, seem to be meaningful given that the base case exports of rice are very small.

Based on these results, it seems that different stakeholders will be affected differently by multilateral market access reforms. The two African regions would lose part of their exports in the wake of the assumed reforms without further preferences, whereas world trade in virtually all agricultural and food products would increase. In

⁷ The results presented in this section are computed without including the Japanese tariff on rice in the deepening and widening scenario. This warrants specific comment. The Japanese rice tariff is set at a prohibitive level. In the multilateral market access scenario, the assumed halving of this tariff would result in a new tariff that is still prohibitive. Meanwhile, a complete deepening scenario would remove this tariff for the two African regions. As a result, exports and hence outputs of rice in the two regions would increase dramatically, leading to massive resource reallocation into rice production. Considering the size of the Japanese rice market, however, it is not credible for Japan to maintain a prohibitive tariff on all countries but the ALDCs. As such, in the scenarios reported here, this possibility is excluded.

fact, market access reform would boost the total value of world exports by almost 6 percent, implying that the ALDCs' shares of agricultural exports would shrink relative to the increased world trade.

Scenario 2. Deepening and widening the trade preferences granted by developed countries would reverse the negative export effects on the two ALDCs caused by the multilateral market access reform. Results from scenario 2 (Table I) show that compared with scenario 1, total exports of agricultural and food products from SSA-1 would increase by more than 17 percent, whereas those from SSA-2 would increase by around 30 percent. In dollar terms, following the deepening and widening action, total agricultural and food exports from SSA-1 would be more than US\$2.4 billion, representing an increase of more than US\$360 million from scenario 1. For SSA-2, the increase is almost US\$2.5 billion. These increases more than make up for the losses sustained from the multilateral market access reform.

The increase in total agricultural exports would not be evenly distributed across products. Those products important to the ALDCs that are excluded from the current preference programs would experience the greatest increase. In percentage terms, the increases are the highest for meat products, dairy products, and sugar for both regions. In addition, exports of fruits and vegetables, as well as oilseeds, would increase significantly for SSA-2. Most notable among the changes are the increased exports of sugar, reaching more than US\$400 million for SSA-1 and around US\$2.5 billion for SSA-2, owing to the high market access barriers for non-LDC exporters (hence, large preference margins) and the substantial trade barriers maintained by several advanced countries for sugar exports from the ALDCs. In contrast, exports of several products from the two ALDCs would decrease (such as plant fibers from both regions and other crops from SSA-2) because of the intersectoral resource movement triggered by the expansion of preferential coverage and the deepening of existing preference programs.

Scenario 3. Those developing countries chosen for the broadening scenario (scenario 3) generally do not offer extended preferential treatment targeting the ALDCs. Their imports from the two African regions are very small, and in some cases no such imports exist according to the GTAP database. So

the resulting changes in exports from the ALDCs in scenario 3 not only depend on the MFN market access barriers of the chosen developing countries, but are also related to the initial export volumes from the ALDCs.

The overall increase in agricultural exports due to the broadening of trade preferences would be around US\$130 million for SSA-1 and US\$260 million for SSA-2. The main sources of these increases are fruits and vegetables, plant fibers, other crops, and meat products. In contrast, exports of sugar, rice, and oilseeds from both regions actually decrease slightly. It should be noted that the overall increases in exports reported for scenario 3 are much smaller than what are obtained from the deepening and widening scenario (scenario 2). Although this result may have something to do with the Armington trade structure employed in the model and with the fact that there is little agricultural trade between the ALDCs and the developing countries used in the scenario, the market size of the developed countries and their role as the ALDCs' traditional markets may be more responsible for the relatively larger export effects from the deepening and widening scenario.⁸ This result seems to discount the optimism about South-South trade, at least in the short and medium run.

Welfare effects. Although the multilateral market access reforms (scenario 1) would benefit most non-LDC countries, the welfare effects turn out to be negative for the two African regions (losses of about US\$50 million and US\$184 million for SSA-1 and SSA-2, respectively), a result that is consistent with Yu and Jensen (2005). To understand this result, the focus should be on the negative export price effect, which dominates the total terms-of-

⁸A simple sensitivity analysis with respect to the Armington elasticities has been carried out by re-running the three experiments with a new set of elasticities that are twice as large as the original ones used in the GTAP model. Results from these simulations show that the increases in agricultural exports from the African LDCs will be higher under both the deepening and broadening scenarios compared with those reported in Table 1. Nevertheless, higher Armington elasticities boost exports under the deepening scenario much more than under the broadening scenario, suggesting that the qualitative conclusion reported in the main text is quite stable with respect to the degree of substitution in the Armington structure.

trade effect for both regions. This negative export price effect is due to two reasons. On the one hand, multilateral market access reforms would lead to lower prices in the export markets and hence lower prices for those ALDC exports covered in preference programs. At the same time, lowering MFN market access barriers would lead to higher prices for exports from countries not receiving preferential treatment. Hence, non-LDCs would be able to crowd out exports originating from the ALDCs. On the other hand, preferential access granted to the ALDCs would actually "trap" their exports and prevent them from shifting to other markets, thereby further dampening the prices of ALDCs' exports. In addition, the ALDCs may be hurt by higher world market prices for their imports.

The negative welfare effects on the two African regions would be more than offset by the deepening of the developed countries' existing preference programs. Results from scenario 2 show that such a move by the developed countries would not only result in improved terms of trade for the ALDCs, but also lead to efficiency gains for them. For SSA-1, the total welfare improvement from scenario 1 would be more than US\$110 million, whereas for SSA-2 it would be almost US\$800 million. Most of these gains are due to improved terms of trade, with the positive export price effects being the dominant factor.

Whereas deepening preferences by the developed countries seems to generate substantial benefits for the ALDCs, according to the simulation results, broadening preferences would not generate similar export expansion and welfare gains for them. The additional welfare gain to SSA-1 from the broadening scenario would be a little more than US\$50 million, and that to SSA-2 would be around US\$90 million.

Effects on preference-granting and other countries. Deepening trade preferences by developed preference-granting countries would lead to small terms-of-trade losses to these countries. For instance, the EU-25 would suffer a welfare loss of US\$582 million (see Table 2). This loss, however, is much smaller than the gains obtained from the multilateral market access reforms (scenario 1). On balance, the developed countries would gain significantly from multilateral market access reforms, even taking into consideration their losses from

deepening their preference programs to the ALDCs. For non-LDC developing countries, the negative impact of more favorable preferential treatment for the ALDCs would also be small, implying that the expansion of exports from the ALDCs would generally not be a big concern for them. For example, the economic welfare of China and India would be reduced by only about US\$4 and US\$17 million, respectively. Thus, broadening trade preferences to the ALDCs would lead to very minor welfare losses for the advanced developing countries.

Overall, other countries' costs of broadening and deepening preferences for African LDCs appear minor. Although not presented here, the trade diversion effects are also small, a result that is consistent with the ALDCs' very small exports in total world trade. Therefore, the concern about trade diversion does not appear to be a major issue.

Alternative Policy Measures

In addition to or instead of the deepening, widening, broadening, and strengthening of trade preferences for the ALDCs, the ALDCs may consider domestic policy changes and institutional reforms aimed at creating an enabling environment for their export-oriented industries and at eliciting adequate supply responses.

Responding to concerns about preference erosion, a number of authors have suggested that enhancing preferences is not the right answer to the problem. They insist that the multilateralism championed by the WTO will eventually help the poorest countries and that transitory issues such as preference erosion can be handled by complementary non-trade policy measures, including effective development aid that aims at tackling prevalent supply response constraints in the ALDCs and at creating supportive and enabling domestic infrastructure.

Assignment

Your assignment is to propose a policy package that would tackle the preference erosion problem facing ALDCs, for discussion by the WTO. The package may include policies to strengthen preferences and/or complementary measures.

Additional Readings

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Table 1: Changes in Exports of Selected Agriculture and Food Products from SSA-1 and SSA-2

Product	Scenario 1				Scenario 2				Scenario 3			
	Export volume (million US\$)		% change		Export volume (million US\$)		% change		Export volume (million US\$)		% change	
	SSA-1	SSA-2	SSA-1	SSA-2	SSA-1	SSA-2	SSA-1	SSA-2	SSA-1	SSA-2	SSA-1	SSA-2
Grains	35.8	48.4	-2.6	-9.5	36.3	48.6	1.3	0.4	36.3	49.1	0.1	0.9
Fruits and vegetables	130.0	810.1	-10.9	-8.3	130.2	1,109.0	0.2	36.9	212.3	1,192.5	63.0	7.5
Oilseeds	25.2	236.1	0.7	-21.5	25.5	403.7	1.2	71.0	25.2	398.8	-1.3	-1.2
Plant fibers	112.9	896.5	0.3	0.5	108.3	841.8	-4.1	-6.1	113.3	910.7	4.6	8.2
Other crops	1,040.6	3,322.0	-5.9	-4.4	1,078.7	3,047.9	3.7	-8.3	1,137.6	3,104.8	5.5	1.9
Bovine meats	1.6	25.8	-26.0	-14.4	1.9	24.4	17.6	-5.5	2.1	25.0	12.6	2.7
Other meats	7.5	36.4	-11.4	-9.4	9.7	53.8	28.9	47.6	14.6	61.6	50.5	14.5
Vegetable oils	6.8	142.7	-8.4	-7.8	6.5	130.0	-4.5	-8.9	6.8	129.4	5.5	-0.5
Dairy	1.1	29.3	-8.0	-5.8	3.3	47.9	191.6	63.5	3.3	49.1	1.1	2.6
Rice	5.7	30.9	2.3	1.8	5.5	28.8	-3.7	-6.6	5.3	28.5	-3.8	-1.1
Sugar	93.6	169.9	-21.3	-49.8	411.6	2,507.8	339.9	1376.1	402.6	2,499.4	-2.2	-0.3
Other food	508.3	2,058.1	-5.6	-5.6	513.7	2,034.3	1.1	-1.2	511.4	2,079.8	-0.4	2.2
Total agrifood	2,052.1	8,226.2	-6.5	-6.9	2,415.3	10,697.5	17.7	30.0	2,555.7	10,960.3	5.8	2.5
Total	6,569.2	52,985.5	-0.7	-0.5	6,674.8	53,948.0	1.6	1.8	6,718.2	54,071.2	0.7	0.2

Source: Simulation results.

Table 2: Welfare Results for Selected Countries and Regions (million US\$)

Country/region	Scenario 1			Scenario 2			Scenario 3		
	Efficiency	Terms of trade	Total	Efficiency	Terms of trade	Total	Efficiency	Terms of trade	Total
Australia and New Zealand	4.2	566.2	545.3	1.2	5.8	6.1	-0.2	-6.5	-6.8
China	830.8	-164.6	575.2	3.9	-1.6	-4.4	3.0	-6.1	-2.6
Japan	3,263.5	-536.2	2,766.7	-4.3	-37.3	-49.3	2.0	-0.7	0.5
Rest of East Asia	1,141.5	-32.5	1,067.6	-81.5	-27.0	-109.8	2.1	-0.9	1.1
ASEAN	554.7	289.6	760.9	-2.6	9.8	7.1	-7.5	-24.1	-31.2
India	830.8	-216.0	610.9	-6.9	-8.1	-16.6	22.5	-26.9	-4.6
Canada	674.5	-112.9	551.3	1.4	9.7	11.0	0.3	-2.4	-1.8
USA	87.5	957.0	1,292.6	14.5	-68.3	-99.4	2.1	-10.7	-18.4
Mexico	321.2	-208.1	108.9	-0.1	6.3	5.8	4.2	-3.5	1.0
Argentina	46.3	259.4	270.1	-0.1	-2.4	-2.2	0.0	-1.8	-1.6
Brazil	162.2	888.0	1,098.6	-3.0	-5.4	-10.3	1.2	-5.0	-4.3
EU-25	5,586.4	-1,255.9	4,276.2	-72.6	-494.1	-582.3	15.5	-33.0	-19.9
SSA-1	-1.4	-42.5	-50.0	3.9	91.4	111.8	-1.1	48.2	53.5
SSA-2	-38.9	-126.8	-184.2	168.2	527.9	772.4	17.0	66.4	91.2
World	16,400.2	-12.2	16,387.8	3.6	-4.6	-1.6	62.5	-0.2	62.3

Source: Simulation results